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Attorney Docket No. D0932-411

**REMARKS**

Claims 1-50 are pending in this application. Claims 43-47 are withdrawn from consideration based on the provisional election made by the Applicant's representative, Won Joon Kouh (Reg. No. 42,763), over the telephone on November 1, 2005. Claims 1-42 and 48-50 are rejected.

The withdrawn claims 43-47 have been canceled without prejudice confirming the election of claims 1-42 and 48-50 for prosecution. The Applicant expressly reserves the right to pursue the canceled claims in a divisional application.

Claims 1, 27 and 50 have been amended.

After the entry of the amendments submitted herein claims 1-42 and 48-50 remain pending.

**Claim Objections**

The Examiner objects to claim 50 for containing a spelling error. In response, claim 50 has been amended to correct the misspelled word "biner" to "binder." Withdrawal of this objection is requested.

**Claim Rejection Under 35 U.S.C. § 112**

Claims 1-42 and 48-50 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because the Examiner does not understand how textile fibers are different from glass or thermoplastic fibers since both types of fibers can be formed into textiles. For the reasons provided below, this rejection is traversed.

In response, the recitation of "textile fibers" in claim 1 has been amended to "textile glass fibers" to be consistent with the recitations of "textile glass fibers" in claims 27 and 48 as originally filed. In the glass fiber industry, the term "textile fibers" or "textile glass fibers" refer to one type of glass fibers and the term "rotary fibers" refer to another type of glass fibers. These classifications of glass fibers refer to the particular methods used to form the fibers and they have distinguishing characteristics as a result. Rotary fibers are made using rotary or spinner process and are generally thin and short. They have fiber diameter in the range of 4-5 µm and fiber lengths less than 100 mm as described in the specification as originally filed. Textile glass fibers are made by direct melt or marble melt process in which molten glass is continuously drawn through a bushing having many holes. Textile glass fibers are generally thicker than rotary fibers and can cut into any desired

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length. Textile glass fibers have fiber diameter in the range of 6-20  $\mu\text{m}$  and for the invention of the present application, the textile glass fibers have fiber lengths in the range of 13-130 mm as described in the specification as originally filed. Furthermore, "textile glass fibers" are glass fibers and thus distinguishable from thermoplastic fibers which are polymer fibers.

Thus, Applicant believes that the meaning of the term "textile fibers" as used in the present application is definite and the claims reciting those term particularly point out and distinctly claim the subject matter of Applicant's invention. Withdrawal of the rejection of claims 1-42 and 48-50 under 35 U.S.C. § 112, second paragraph, is requested.

**Claim Rejection Under 35 U.S.C. § 102**

Examiner rejects claims 1-2, 4, 9-12, 15-17, 21-28, 30, 35-42, 48, and 50 under 35 U.S.C. § 102(b) as being anticipated by United States published Application No. 2003/0049488 to Yang *et al.* ("Yang").

In response, independent claim 1 has been amended to require that "**the fibers and the at least one binder are blended together**, the at least one binder bonding the fibers together to form the insulation product." Similarly, independent claim 27 has been amended to require that "**the fibers and the at least one binder are blended together**, the at least one binder bonding the fibers together to form the fibrous insulation mat . . .".

In contrast, the insulation product disclosed in Yang has a laminated structure in which each layer in the laminated structure is made of different type of fibers. (See Yang at, for example, paragraphs [0013], [0022], and [0023]). This is further illustrated in FIGs. 1A, 1B and 1C and the associated text in paragraphs [0027] – [0028] of Yang. The fibrous layers identified by reference numbers 2 and 3 in these figures are rotary fiber layers and textile fiber layers, respectively.

Therefore, Yang does not disclose the invention as claimed in the amended claims 1 and 27. Allowance of the amended claims 1 and 27 is requested.

Claims 2, 4, 9-12, 15-17, and 21-26 depend from the independent claim 1, which is allowable over Yang. Because a dependent claim incorporates all limitations of its parent claim, claims 2, 4, 9-12, 15-17, and 21-26 are also allowable over Yang. Withdrawal of their rejection and allowance of these dependent claims are requested.

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Claims 28, 30, and 35-42 depend from the independent claim 27, which is allowable over Yang. Because a dependent claim incorporates all limitations of its parent claim, claims 28, 30, and 35-42 are also allowable over Yang. Withdrawal of their rejection and allowance of these dependent claims are requested.

Independent claim 48, as originally filed, recites:

A thermal and acoustical insulation product comprising:

**a blended mixture of rotary and textile glass fibers, thermoplastic fibers and resinous binder, said rotary and textile glass fibers being bonded together by the combined adhesion caused by heating said blended mixture whereby said thermoplastic fibers and said resinous binder are disposed at least partially in molten state and thereafter cooling said heated blended mixture to ambient temperature to form said insulation product.**

Thus, as discussed above in reference to claims 1 and 27, Yang does not disclose a thermal and acoustical insulation product as claimed in claim 48. Yang discloses an insulation product having a laminated structure in which each layer in the laminated structure is made of different type of fibers. (See Yang at, for example, FIGs. 1A, 1B, 1C and paragraphs [0013], [0022], [0023], and [0027] – [0028].) Withdrawal of the rejection of claim 48 and its allowance are requested.

Claim 50 depends from claim 48, which is allowable over Yang. Because a dependent claim incorporates all limitations of its parent claim, claim 50 is also allowable over Yang. Withdrawal of its rejection and allowance of claim 50 are requested.

#### Claim Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 5-8, 18, and 31-34 under 35 U.S.C. § 103(a) as being unpatentable over Yang.

Claims 5-8, and 18 depend from claim 1 and claims 31-34 depend from claim 27. Because claims 1 and 27 are allowable over Yang, claims depending therefrom are also allowable over Yang. Therefore, withdrawal of their rejection and allowance of claims 5-8, 18, and 31-34 are requested.

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The Examiner rejects claims 3, 29, and 49 under 35 U.S.C. § 103(a) as being unpatentable over Yang in view of Published U.S. patent application US 2003/0008586 to Kajander ("Kajander"). For the reasons presented below, this rejection is traversed.

Claims 3, 29, and 49 depend from claims 1, 27, and 48, respectively, which are all allowable over Yang, as discussed above. Namely, the claims 1, 27, and 48 require thermal and acoustical insulation product comprising a blended mixture of rotary and textile glass fibers and binder fibers whereas Yang discloses a laminated structure in which each layer in the laminated structure is made of different type of fibers. (See Yang at, for example, FIGs. 1A, 1B, 1C and paragraphs [0013], [0022], [0023], and [0027] – [0028].) And Kajander does not cure this deficiency of Yang. As shown in the portions of Yang cited above, the laminated structure is the key feature of the insulation product described in Yang. Thus, one could not validly combine the teachings of Yang with the disclosure of Kajander, or any other references for that matter, to modify the laminated structure of Yang to one that is not laminated.

Accordingly, because claims 3, 29, and 49 incorporate the limitations of their parent claims, 1, 27, and 48, respectively, claims 3, 29, and 49 are also allowable over Yang. And because Kajander does not cure the deficiency of Yang, Yang and Kajander, whether taken singly or in combination, do not teach or suggest the invention claimed in claims 3, 29, and 49. Withdrawal of the rejection of claims 3, 29, and 49 and their allowance are kindly requested.

Claims 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yang in view of Published U.S. patent application 2004/0038017 to Tutin *et al.* ("Tutin"). For the reasons presented below, this rejection is traversed.

Claims 19 and 20 depend from claim 1, which is allowable over Yang. As discussed above, because Yang reference discloses insulation product having a laminated structure in which each layer in the laminate is made of different type of fibers, it does not disclose the invention of claim 1. Tutin discloses formaldehyde-free polymer binder composition that may be used in the manufacture of glass fiber insulation products. (See Tutin at, for example, paragraphs [0002], [0016], and [0024]-[0072]). However, as with Kajander, Tutin also does not teach any motivation to modify the laminated product of Yang to a blended mix of rotary glass fibers, textile glass fibers, and binder fibers.

Accordingly, because claims 19 and 20 are allowable over Yang, and Tutin fails to cure the deficiency of Yang, Yang and Tutin, whether taken singly or in combination, do not teach or

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suggest the invention claimed in claims 19 and 20. Withdrawal of the rejection of claims 19 and 20 and their allowance are kindly requested.

**CONCLUSION**

Applicants believe that the pending claims as amended are in condition for allowance. All amendments submitted herein are fully supported by the disclosure of the Specification as originally filed and no new matter has been added. Reconsideration of the present application, withdrawal of the rejections and allowance of the pending claims are kindly requested. Should Examiner not agree with Applicants' position, then a telephone interview is respectfully requested to discuss any remaining issues and expedite the eventual allowance of the application.

As shown in the attached Patent Application Fee Determination Record sheet, no additional claim fee is believed due for the filing of this amendment and response.

Respectfully submitted,



Won Joon Kouth  
Reg. No. 42,763  
Attorney for Applicant  
(610) 861-4925

PTO Customer No. 08933  
DUANE MORRIS LLP